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THE ECONOMIC BASIS OF THE DECLINE OF ANCIENT  
CULTURE

NO one will question the fact that there was, at the end of the period of ancient history, an immense decrease in the quantity and quality of the production of those human goods whose sum represents that all-inclusive thing which we call civilization. We are all agreed as to the area of the world's surface included in the sphere of ancient culture, namely, the ancient Mediterranean world. There is some divergence of opinion, however, in regard to the time at which the rapid decline in intellectual interest and vigor occurred. Far greater is the diversity of opinion as to the reasons which underlie this, the most tragic act in the drama of human development. The causes usually advanced in histories written in English may be summarized as follows: (1) the ancient system of slavery; (2) the decrease in population; (3) the ancient system of taxation; (4) the constant drain of precious metals to the East; (5) Christianity; (6) the infiltration of barbarians into the empire. There are a number of lesser causes which are cited here and there. These six, however, are the ones commonly presented as most important.<sup>1</sup> Fortunately the old view of the moral degeneration of ancient society as a primal cause for the decline seems to have been pretty generally abandoned.<sup>2</sup> I am, therefore, relieved of the necessity of refuting it.

<sup>1</sup> They are chiefly based on the following authorities: an article by Thomas Hodgkin in the *Contemporary Review*, LXXIII. 51-70 (1898), entitled "The Fall of the Roman Empire and its Lessons for us"; Lavissee and Rambaud, *Histoire Générale du IV<sup>e</sup> Siècle à nos Jours* (Paris, 1893), I. 28-31; John G. Shepard, *The Fall of Rome and the Rise of the New Nationalities* (London, 1861); Hodgkin, *Italy and Her Invaders* (Oxford, 1892), II. 532 and 533.

<sup>2</sup> It will still be found, but used with great caution, in George Burton Adams, *Civilization during the Middle Ages* (1904), p. 79. It should be definitely set aside, both because the fact is incapable of proof and because the effects of sexual immorality of individuals upon society at large have not, so far as my knowledge goes, been scientifically determined.

An essential weakness of the old discussions of the causes of the decline lies in the fact that they did not sharply define the character of the catastrophe and the relative time at which it occurred. It is a matter of internal decay, a desiccation of intellectual vigor in no way induced by external circumstances and accidents. Its manifestations appear markedly after the principate of Trajan when the martial vigor of the Roman Empire still seemed unabated and its powers of expansion unimpaired. The intellectual bankruptcy of the ancient world is declared in the period stretching from about 150 A.D. to 300 A.D. From the time of Constantine forward we are in another intellectual world.<sup>3</sup> It goes without saying that the process of decay, despite its sudden manifestation, was a gradual one. Posidonius of Rhodes stands out as the last great scientific mind which the Greek world produced.<sup>4</sup> Isolated figures appear after his day, like that of Galen, court physician to the Emperor Marcus Aurelius, whose works echo reminiscently the tones of the great days and the ideas of the master minds. But the great days were past and the masters were dust.

In what ways can we specifically prove so illusive a thing as a decline in human intellectual vigor? Eduard Meyer has enumerated a number of evidences of the decline in his *Wirtschaftliche Entwicklung*.<sup>5</sup> In addition to and in confirmation of the list which he gives there is much evidence that might be cited. The art of the age of Constantine is so vitally different from that of the period of the Antonines that the brilliant Polish archaeologist, Josef Strzygowski, was constrained to explain it as a recrudescence of the artistic canons and forms of the old Oriental art of Pharaonic Egypt.<sup>6</sup> His explanation has not been widely accepted. But the fact of the tremendous loss in artistic conception and technique is apparent.<sup>7</sup> It is best explained, since it occurs throughout the empire, as due to the depraving of Graeco-Roman artistic standards and output, a retrogression to primitive forms and viewpoint.<sup>8</sup> The conventional

<sup>3</sup> Eduard Meyer, *Die Wirtschaftliche Entwicklung des Altertums* (Jena, 1895); revised and reprinted in *Kleine Schriften* (Halle, 1910). This article must certainly be used as the foundation of any new treatment of the economic causes of the decline of ancient culture.

<sup>4</sup> Von Wilamowitz, *Staat und Gesellschaft der Griechen und Römer*, p. 184.

<sup>5</sup> See *Kleine Schriften*, p. 146, note 1.

<sup>6</sup> Josef Strzygowski, *Orient oder Rom: Beiträge zur Geschichte der Spät-Antiken und Früh-Christlichen Kunst* (Leipzig, 1901).

<sup>7</sup> See the porphyry groups from Saint Mark's at Venice which Strzygowski has discussed in *Klio*, II. 105 ff.

<sup>8</sup> So Furtwängler explains it in the *Berliner Philologische Wochenschrift* (1903), p. 947.

types of the coins of the third century strikingly illustrate the decadence of art and the debasement of social life.<sup>9</sup>

The falling off in the spirit of commercial enterprise is evidenced by the history of the trade of the empire with India. As proved by the finds of Roman coins in India the eastern trade flourished from the time of Augustus to that of the Antonines.<sup>10</sup> It reached its greatest height about the last of the first century.<sup>11</sup> Evidences of continued trade exist until the middle of the third century, followed by a lull which lasted until a revival occurred at the close of the fourth century. Another drastic proof of decline, which is often advanced as a cause, is to be found in the wrecking of the imperial administration in the third century which resulted in the rebellion and independence of exposed territorial units of the empire. By the weakness of the central authority these districts were forced to undertake their own measures of defense and administration.<sup>12</sup>

The correct placing of the bankruptcy of ancient civilization is sufficient to eliminate two of the causes advanced to explain the intellectual poverty and degradation of vitality which succeeded upon the wealth of culture and splendid vigor of the great period of Greek and Roman life. The first of these is the barbarian peril, commonly formulated as the "incursion", "infiltration", or "invasions" of the barbarians. Before the time of Marcus Aurelius there had been no vital harm done by the barbarian invasions, such as had occurred in the third, second, and first centuries B.C. The Greek and Roman world had suffered "infiltration" from early times and had, as it always would have done under healthful conditions, absorbed these elements without pathological results. It was when internal disorders had lowered the resistance of imperial society, from 200 A.D. onward, that the barbarian invasions accelerated the process of decline and powerfully accentuated the hardness and crudity of life which other causes had long since prepared and produced.

The second force which may be eliminated as a destructive factor by the sharper definition of the primary period of decadence is Christianity. It is an impossibility to obtain any satisfactory statistics upon which to base an estimate of the relative proportion of the Christian to the pagan population of the empire even in the third

<sup>9</sup> E. Babelon, *Traité des Monnaies Grecques et Romaines* (Paris, 1906), I. 62.

<sup>10</sup> G. F. Hill, "Roman Aurei from Pudukota, South India", in *Numismatic Chronicle*, third series, XVIII. 304 ff. (1898).

<sup>11</sup> Speck, *Handelsgeschichte des Altertums* (Leipzig, 1900), I. 197.

<sup>12</sup> See Eduard Meyer, *Kleine Schriften*, p. 146, note 1.

century. Adolf Harnack's careful study of the evidence obtainable leads him to conclude that in 300 A.D. the percentage of Christians in the eastern portions of the empire fell far below one-half of the total population. In the West the proportion must be greatly reduced below that in the East.<sup>13</sup> About 250 A.D. the Christian community in Rome, the oldest and strongest of the churches of the West, may well have formed between three and five per cent. of the total population of the city.<sup>14</sup> The first traces of Christianity which the Greek papyri have brought us from Egypt are a few certificates made out to people who had officially proved that they were not Christians.<sup>15</sup> These are of the year 250 A.D., in the time of the persecution under Decius. A business letter from a Christian in Rome to a brother Christian in the Fayum which mentions the Alexandrian Bishop Maximus falls within the years 264-282 A.D.<sup>16</sup> This is all that we have upon the Christians of Egypt in the several thousand extant papyri preceding the persecutions under Diocletian. Until further papyri may have changed the impression left by this lack of Christian documents from Egypt before 300 A.D. we are not justified in postulating a large Christian population in that country. It is therefore impossible to assign to Christianity any marked influence upon the empire, either economically or socially, before 300 A.D.<sup>17</sup>

The old belief that the growth of the ascetic ideal and monasticism affected the empire by withdrawing vigorous elements from participation in active life has, I judge, been entirely abandoned. This development, which is to be assigned to the fourth century,<sup>18</sup> came much too late to be considered seriously as a cause of decline, even if the numbers of those affected ever justified such an assumption.

The theory of the drainage of gold to India in coin and bullion is based upon two statements in Pliny's *Natural History* and upon the fact that a number of finds of Roman imperial coins have been made in India during the past century. Pliny says (*Natural History*, VI. 101): "This subject [the route from Egypt to India] is worthy of attention since India in no year drains less than 50,000,000 sesterces [550,000,000 according to the corrupt text of Pliny], of

<sup>13</sup> Harnack, *Die Mission und Ausbreitung des Christentums*, II. 277.

<sup>14</sup> *Ibid.*, p. 211, note 4.

<sup>15</sup> Ulrich Wilcken, *Papyruskunde, Grundzüge*, p. 130, and *Chrestomathie*, nos. 124 and 125 (Leipzig, 1912). Several other similar certificates, which are in the city library of Hamburg, have not yet been published.

<sup>16</sup> Wilcken, *Papyruskunde, Chrestomathie*, no. 126.

<sup>17</sup> See Harnack, *Mission und Ausbreitung*, II. 287.

<sup>18</sup> Harnack, *Das Mönchthum* (fifth ed., Giessen, 1901), p. 8.

our empire, remitting in goods which are sold among us at a hundred fold gain." Again he says (*Natural History*, XII. 84): "India and Seres and that Peninsula [Arabia] take away from our empire annually, at the lowest computation, 100,000,000 sesterces. So much do our luxuries and our women cost us." This has been generally accepted as meaning that these sums—\$2,500,000 for India alone, \$5,000,000 for Arabia, India, and Seres—went out of the empire in coinage or in bar,<sup>19</sup> although there is nothing in either passage, which, in my judgment, necessitates this interpretation. On the contrary, in the first passage Pliny mentions the importance of the route from Egypt to India because of the trade which plied between them. Certainly the ships from Egypt went to India laden with goods, not money alone. If we accept Pliny's statement at its face value and reckon the complete sum for the period from Augustus to Antoninus Pius, we come to the conclusion that the drainage of Roman imperial coins to India was \$750,000,000 during the period of the height of the Indian-Roman trade. The sum seems quite out of proportion to the possible gold and silver supply of the ancient world. I cannot accept the passages of Pliny, in themselves of questionable interpretation, as sufficient proof of the drainage of imperial coins to India. There are no other authorities, so far as my knowledge goes, upon which such a claim may be based.

Even in the pages of Pliny assurance may be had that the trade with India was one of exchange of the products of the empire for many forms of eastern goods necessary to the high standard of living maintained within the empire. He states, for example, that India had neither copper nor lead, and exchanged her gems and pearls for these.<sup>20</sup> He indicates in two places that the gain to the Roman merchants engaged in the Indian trade was large.<sup>21</sup> A report has come down to us of the exports and imports of northern India as they passed into and out of Barygaza (Broach on the Gulf of Cambay).<sup>22</sup> The exports were onyx, myrrh, Indian muslins, mallows, a great deal of coarse linens, nard, costus (a pepper-

<sup>19</sup> E. Speck, *Handelsgeschichte des Altertums*, I. 201. The two quotations from Pliny are usually supported by the vague statement in a letter of Tiberius to the senate (Tacitus, *Annals*, III. 53), in which Tiberius is made to say that the money of the empire was sent to foreign or hostile races to buy precious stones for the Roman women. The letter of Tiberius was "edited" by Tacitus, not given verbatim. Furthermore we know nothing as to the truth or falsity of Tiberius's statement. It is meagre proof of the drain of money to India.

<sup>20</sup> Pliny, *Naturalis Historia*, XXXIV. 163.

<sup>21</sup> *Ibid.*, VI. 101, and XIV. 52.

<sup>22</sup> *Anonymi Periplus Maris Erythraei* in Carolus Müller, *Geographi Graeci Minores*, vol. I.

like spice), and leeches. It is distinctly stated that these were goods destined for the empire trade.<sup>23</sup> An additional list of exports includes ivory, lycium (a medicinal plant), silks, yarn, and long peppers. The imports passing into India *via* Barygaza were: wines, chiefly Italian, Laodicean, and Arabian; copper and tin; coral and chrysolith; cheap garments of every sort; highly embroidered girdles; styrax (a gum for incense); honey clover; gold and silver coins, which were exchanged with some profit for the local coinage.<sup>24</sup> The imports destined for the Indian king of that reign were regal—heavy silver plate, musical instruments, shapely maidens, wine of superior quality, costly garments, and a fine quality of myrrh. The indications are that the export of luxuries westward into the empire was met by a fairly equal amount of luxuries carried eastward from the empire. Furthermore, the annual balance of credit, as indicated by Pliny's statement of the great profit in the Indian trade, seems to have been favorable to the empire's merchants.

In addition to the proofs given that there is no responsible authority behind the theory of a great export of money to India from the empire, a number of other considerations help to make the idea untenable. I have been able to trace but five important finds of Roman coins in India, four of which are mentioned by Mommsen.<sup>25</sup> The fifth is a hoard discovered early in the year 1898 in the territory of the Rajah of Pudukota.<sup>26</sup> Unfortunately, I was unable to obtain a copy of the *Coin Catalogue of the Madras Government Museum* in which the finds of Roman coins in India are gathered together by Mr. Edgar Thurston. The catalogue of coins of the Indian Museum at Calcutta shows but nine Roman coins of undoubted genuineness, as against 118 Graeco-Bactrian, 10 Seleucid, 15 Greek, and 42 Parthian coins.<sup>27</sup> The catalogue of the Panjab Museum at Lahore shows no Roman coins.<sup>28</sup> It is surprising, not that Roman coins have been found in India at all, but that so few finds have been recorded. India at the present time absorbs large quantities of silver from Europe and America, probably a

<sup>23</sup> καὶ τὰ πρὸς ἐμπορίαν τὴν ἡμετέραν, l. c.

<sup>24</sup> Mommsen's suggestion regarding the use of an inferior plated coin in the Indian trade of the empire (in Mommsen-Blacas, *Histoire de la Monnaie Romaine*, III. 337, note 1, and p. 338) as a sort of "trade dollar", is based upon this passage, and the fact that denarii of Augustus have been found in considerable numbers in India, which are of base metal plated with silver.

<sup>25</sup> Mommsen-Blacas, III. 337, note 2.

<sup>26</sup> G. F. Hill in the *Numismatic Chronicle*, third series, XVIII. 304 ff.

<sup>27</sup> Charles J. Rodgers, *Catalogue of Coins, Indian Museum at Calcutta* (Calcutta, 1893).

<sup>28</sup> R. B. Whithead, *Catalogue of Coins in the Panjab Museum, Lahore* (Oxford, 1914).

larger quantity in relation to its exports than from the Roman Empire in ancient times. This silver does not return, because of the immemorial practice of hoarding still prevalent in India.<sup>29</sup> Yet we do not apply to England and America of to-day Mun's mercantile theory, that the economic well-being of a country is measured by the surplus in money derived from its favorable balance of trade with another country. No more should it be applied to the Roman Empire in its trade relations with India.<sup>30</sup>

The disappearance of commodity money from circulation in the Roman world was due to hoarding within the empire. This is sufficiently attested by the hundreds of finds of coins in all parts of the empire.<sup>31</sup> Hoarding was due, primarily, to the lack of deposit banks<sup>32</sup> and was greatly increased when economic disorders began to appear in the second century and reached their climax in the third century after Christ.

It is quite impossible to regard the depopulation of the empire as a cause of decline in its culture. The reasons for this statement may be briefly given. 1. Our sources of information upon the population of the ancient world are exceedingly meagre. Of the general census returns from the various parts of the Roman Empire we have only a few notices and their accuracy is very problematic. In other words we have no reliable statistics. We must be chary of making general deductions on the basis of statements of even the best ancient historians, such as Polybius. This attitude of scepticism is, of course, all the more essential when we deal with the historians who rank as secondary and tertiary sources of information.<sup>33</sup> 2. Upon general considerations of the movements of population there is reason to believe that the total population of the empire in-

<sup>29</sup> Ad. Soetbeer, "Die Werthrelationen der Edelmetalle", in Hirth's *Annalen des Deutschen Reiches* (1875), pp. 317-318.

<sup>30</sup> My colleague, Professor C. A. Smith, has suggested that the idea of the drainage of gold and silver to India and its disastrous effects upon the ancient Roman economic order probably arose from the application of Mun's mercantile theory, in the seventeenth or eighteenth century, to the statements quoted above from Pliny's *Natural History*. See Thomas Mun, *England's Treasure by Foreign Trade* (reprinted by Macmillan, New York, 1895), pp. 29-30.

<sup>31</sup> See the list of 871 finds of coins in France, Belgium, Luxemburg, and the Rhenish provinces of Germany, recorded by Adrian Blanchet in *Les Trésors de Monnaies Romaines et les Invasions Germaniques en Gaule* (Paris, 1900), pp. 31-53. The great majority of these fall within the period from the accession of Augustus to the death of Constantine the Great.

<sup>32</sup> T. Louis Compargette, *Debasement of the Silver Coinage under the Emperor Nero* (New York, 1914), pp. 6-7.

<sup>33</sup> See Eduard Meyer's article upon the population of the ancient world in *Handwörterbuch der Staatswissenschaften*, II. 900. Meyer's article is the basis of my attitude upon this question.



creased steadily during the first century and a half after Christ. For the cities this is made probable by their areas, as shown by excavations upon ancient sites. For the agricultural districts during the same period, the time of the growth of the colonate, an increase, rather than a decrease, would better accord with the general theory of population and poverty.<sup>34</sup> Statistics are, of course, absolutely lacking. 3. The depopulation of the third and succeeding centuries is primarily a result of decline and only secondarily and in the culmination of disasters a cause.<sup>35</sup>

For our knowledge of the numbers of the slave population of antiquity and the ratio of slave to free labor the same baffling situation exists as for the question of population. We have no statistics which may be trusted to give us an accurate picture. Consequently the field has been left open to speculation and to general impressions based upon the statements of the literary sources, which should be applied only to specific districts. Again it is Eduard Meyer who has given us a new point of view in his *Sklaverei im Altertum*,<sup>36</sup> correcting the exaggerated and distorted picture presented during the world-wide anti-slavery movement of the eighteenth and nineteenth centuries. In the economic life of the great Oriental section of the Roman Empire, including Egypt,<sup>37</sup> slavery never played an important rôle in agricultural life. In industry and trade slaves were found in the large manufacturing centres, but in limited numbers. Household slaves were a luxury of the rich.<sup>38</sup>

In the Greek communities the rise of slave labor was a feature and a part of the development of "manufactory" industry. From the early part of the sixth century onward the numbers of the slave artisans increased in the cities like Corinth, Aegina, Athens, and Syracuse, which were the centres of industrial life.<sup>39</sup> From the industrial centres the use of slaves spread into agricultural life, but it never became in Greece the dominant form of farm labor, as it later did in Italy and Sicily. In certain portions of Greece, as in the central part of the Peloponnesus and in the middle-western sec-

<sup>34</sup> Francesco S. Nitti, *Population and the Social System* (London, 1894), pp. 146, 148, 149, 162.

<sup>35</sup> For Eduard Meyer's summary of the movements of population in the empire see *Handwörterbuch der Staatswissenschaften*, II. 911-912.

<sup>36</sup> Reprinted in *Kleine Schriften*, p. 169 ff. The advance made by Eduard Meyer lies in his clear grasp of slavery as an institution which has existed throughout the course of civilization. Economically it is merely one form of the labor supply competing with the supply of free laborers in the labor market.

<sup>37</sup> On the subject of slavery in Ptolemaic and Roman Egypt see Ulrich Wilcken, *Papyruskunde, Grundzüge*, pp. 27, 260.

<sup>38</sup> Eduard Meyer, *Kleine Schriften*, pp. 189-192.

<sup>39</sup> *Ibid.*, p. 198.

tions of Greece, slavery did not at any time gain a firm foothold. Even in the industrial centres we must not lose sight of the continued existence of free artisan labor, working as units in the hard competition with the capitalistic manufactories, which naturally preferred to use unfree artisans because of the lower production cost. There was no organization of labor for its economic defense. Consequently the picture is that of capital using that form of labor which it could obtain most cheaply and exploit most advantageously. It was the unskilled free labor, naturally, which suffered most in this competition of free workmen against slave workmen. The building inscriptions at Athens show that few slaves were employed in the building trades and that these worked as assistants to the free artisans.

In Italy and Sicily in the last two centuries of the Roman Republic the free peasant undeniably went to the wall in the competition with cheap slave labor employed by the landed proprietors. Special conditions peculiar to the Italian state under Rome's hegemony brought about this result. The conditions existing in these two portions of the empire have given rise to the popular exaggeration of the extent of slavery and the notion of its decisive results upon the ancient economic and social order. After the victory of Octavianus at Actium in 31 B.C. and the establishment of the *pax Romana*, the slave supply, which was largely that of wars of the Roman imperialistic period, diminished greatly. At the same time there was no change in the willingness to emancipate slaves, as evidenced by the emancipation inscriptions. For two centuries, therefore, before the great break manifested itself, slavery had been rapidly decreasing and a new type of labor, neither free nor slave, had been taking its place. The height of the slave system in antiquity was synchronous with the highest development of ancient civilization. The economic background for the decline of ancient culture was not slavery, but the Roman colonate.

It is certain that the breaking of the ancient economic and intellectual order of society was due primarily to causes within the Roman Empire. External relations had little appreciable bearing upon the great change. The faults to be found in the current ideas upon the subject are two in number: (1) the habit of viewing separately certain economic phases of ancient society which were inextricably interwoven and inseparable; (2) an insufficient knowledge of the greatest of the difficulties which faced the Roman Empire—the agrarian problem. Combining the information obtained from comparatively recent finds of papyri and inscriptions with the two important sources previously extant, the literary

sources (including the Latin agrarian writers) and the Theodosian and Justinian codes, the course of the agrarian development becomes fairly clear in its general outlines. Many details must yet be subjected to intensive investigation and reconstruction. Of the extensive literature which has sprung up in the past twenty-five years upon this field of work two studies stand out prominently as fundamental, Rostowzew's book upon the Roman colonate<sup>40</sup> and Weber's investigation of Roman agrarian history.<sup>41</sup>

The statement that the Roman system of taxation was the cause of the shattering of ancient civilization is an obvious half-truth. It merely begs the question. Why did taxation, which is a necessary evil, cause the collapse? Upon whom did the burden of taxation fall? Why could not the burden-bearers endure the weight of their taxes? In like manner it has always seemed to me to be entirely futile to say that ancient civilization finally collapsed because the Greeks and Romans put money into beautiful municipal buildings and sunk their wealth in unproductive public works. The ancients, as well as we, had the right "to furnish to the spirit manifold relaxations from labors, taking heed of public games and festivals in their season, and of an attractive setting for our private lives. For the delight of these things day by day drives away wretchedness."<sup>42</sup> The entire question of taxation, with the inquiry into the legitimate or illegitimate expenditure for public recreation, can only be dealt with in connection with the large problems of production. For the Roman Empire the question of taxation is largely a phase of the wide-spread problem of the organization and administration of the state domains.

The difficulties which invested this side of Roman administrative policy were, for the peninsula of Italy, the results of the early development of Rome herself. But in the provinces they were an evil inheritance of her conquests. There the roots of the difficulty were deeply embedded in the past development of the Greek states, of the Persian Empire, and the empire of the Pharaohs. When Rome absorbed Carthage, Greece, Asia Minor, Syria, Palestine, and Egypt she brought under her domain, accepted, and spread an economic order that was rapidly developing the seeds of its own doom.

When Alexander the Great conquered the Persian Empire he found that the land of Asia Minor outside of the cities was held

<sup>40</sup> M. Rostowzew, *Studien zur Geschichte des Römischen Kolonats*, I. Beiheft of the *Archiv für Papyrusforschung* (Leipzig, 1910).

<sup>41</sup> Max Weber, *Die Römische Agrargeschichte in ihrer Bedeutung für das Staats- und Privatrecht* (Stuttgart, 1891).

<sup>42</sup> Pericles in Thucydides, II. 38.

either as domain land of the Great King or as great proprietary estates.<sup>43</sup> Almost all of the land was apparently given over to nobles and priests, who had emigrated from Iran. Castles arose throughout the country which served as strongholds and as the residences of the foreign land-holding nobility. A free native peasantry was transmuted into a serf population, bound to the soil. In general it is fairly safe to say that the midland of the Persian Empire was characterized by large landed estates held in fee from the Great King. This system probably had attained its characteristic features under the Assyrian Empire.<sup>44</sup> Its origins may be traced deeply into the Babylonian period.

Especially in the Nile valley Alexander assumed control of an agricultural state in which the land had for ages been the farm of the Pharaoh and the laborers his peasants, each enrolled at the definite place where he was called upon for his villein service.<sup>45</sup> In trade and industry, as well as in agrarian production, the Pharaoh had been the one great capitalist capable of far-reaching enterprises. It is probable that the weaving and export of linen had at times been a monopoly of the Egyptian kings.<sup>46</sup> The great mercantile expeditions into Yam (central Africa) under the Old Kingdom and those of Queen Hatshepsut into Punt were entirely royal enterprises. In Babylonia and Assyria, too, the influence of the royal storehouses upon industry and trade must have been overpowering.<sup>47</sup>

Upon this form of land tenure and industrial production the ancient Oriental monarchies had reached a status of relative social equilibrium and stability during the last centuries of the second millennium and the first half of the first millennium B.C. The Persian rule of the empire of western Asia seems to have brought with it economic stagnation. The irrigation system in the Tigris-Euphrates basin declined, and the entire economic vitality seems to have been sapped, along with other causes, by the excessive de-

<sup>43</sup> See Rostowzew, *Geschichte des Röm. Kolonats*, pp. 240-243. For the manorial estates in Lydia and Maeonia see Georges Radet, *La Lydie et le Monde Grec au Temps des Mermnades* (Paris, 1893), pp. 87, 90, 91; for the land system in Pontus and Cappadocia, Th. Reinach, *Mithradates Eupator* (German translation, Leipzig, 1895), pp. 14, 17, 235-236, and Eduard Meyer, *Geschichte des Königreichs Pontos* (Leipzig, 1879), p. 17.

<sup>44</sup> Max Weber, article "Agrargeschichte" in *Handwörterbuch der Staatswissenschaften*, I. 71, 73-80. This remarkable article contains the best survey of the combined political-economic development of antiquity that we have. It is indispensable to anyone who wishes to gain a thorough understanding of ancient economic problems and is the source of many of the ideas here presented.

<sup>45</sup> Weber, in *Handwörterbuch der Staatswissenschaften*, I. 85.

<sup>46</sup> *Ibid.*, p. 88.

<sup>47</sup> *Ibid.*, p. 80.

mands of the local governors for taxation, which was paid in produce.<sup>48</sup> As this economic system set and became rigid, the culture of the ancient Oriental world had become traditional and stereotyped. The result of the system was spiritual monotony and intellectual anemia.

Granting that Eduard Meyer<sup>49</sup> has overemphasized the modernness of the industrial character of Greek and Roman economic life, the fact remains that his interpretation is, in its larger aspects, the correct one and the essential basis for any further discussion of the subject.<sup>50</sup> It may be best to avoid misunderstanding in dealing with ancient Greek industry by abjuring the use of the terms "factory" and "factory hands", the connotations of which are so irretrievably modern. These reservations do not at all change the fact that we have in the Greek world, from about 700 B.C., the development of cities with a wide expansion of industry and transmarine trade between the far-spread Hellenic city-states such as, quantitatively, the world had never before seen.

The articles for export, especially vases, were made in the Hellenic industrial centres of the period from 700 B.C. in "manufactories". The "manufactory" was the workroom of some wealthy man who was often an importer of raw products. The part of his supply which he might not sell to free artisans was worked into form for the local or export market in his *ergasterion* by bought or rented slaves.<sup>51</sup> The free artisans, too, whether working singly or in a group, at home or in a small shop, were certainly manufacturing for export as well as for local trade.

Recent archaeological activity and the scientific analysis of the vase types found in various parts of the Mediterranean world are gradually leading to an accurate and unassailable knowledge of the general spread of trade of the Hellenic city-states and the special spheres of certain industrial cities, as well as the overlapping of the trade of one city into the sphere of another.<sup>52</sup> The increasingly com-

<sup>48</sup> Weber, *Handwörterbuch der Staatswissenschaften*, I. 125.

<sup>49</sup> In his "Wirtschaftliche Entwicklung des Altertums", in *Kleine Schriften*, p. 79 ff.

<sup>50</sup> For an excellent summary of the discussion between Eduard Meyer and the economists, Rodbertus and Karl Bücher, see again Weber's article, already so often cited, upon "Agrargeschichte" in the *Handwörterbuch der Staatswissenschaften*, I. 54 ff. Compare also the *exkurs* at the end of Kurt Riezler's excellent study, *Ueber Finanzen und Monopole im alten Griechenland* (Berlin, 1907).

<sup>51</sup> See Max Weber, *Handwörterbuch der Staatswissenschaften*, I. 56.

<sup>52</sup> Hugo Prinz in his article "Funde aus Naukratis", in *Klio: Beiträge zur alten Geschichte*, VII. Beiheft, has given a remarkable picture of the export trade in pottery from the Greek city-states.

mercial character of the external politics of the Greek states after 700 B.C. is a result of this free and active competition.<sup>53</sup> Other characteristics of the commerce and industry of the "classic period" are the rapid spread of the use of commodity money and a very large relative increase in the size of cities. The Hellenic world, however, developed very unevenly in this respect and the industrial cities were largely confined to the coastal areas. Central-western Greece, Epirus, and Macedon did not share in the industrial evolution until later. Nor did the use of coinage in exchange ever develop in antiquity to the point of superseding entirely exchange and payment in *naturalia*.<sup>54</sup> Yet the outstanding characteristics of the Hellenic world at its height, as compared with the economic world which preceded it and that which followed the decline of ancient civilization, are these: (1) large cities; (2) manufactories in these cities whose output was destined and used for a widespread export trade; (3) the use of commodity money in exchange.

The Greek system of land tenure shows a freedom of alienation commensurate with the freedom of trade and industry, except in those states which, like Thessaly and Sparta, were directly organized on the strict basis of a land-holding citizen army and in which the citizen allotments were theoretically inalienable. Despite the fact that the citizen army of Athens in the fifth century was largely a corps of free peasantry, enrollment in the demes was even then quite independent of calling or domicile. Ownership of land was no longer essential for deme registration.<sup>55</sup>

It was under such conditions of economic freedom that the Hellenic world developed its remarkable civilization, distinguished by that intensity of individual expression which still impresses us as so singular and so inspiring. In the fourth century, during the exhausting period of the inter-state wars, the insufficiency of the city-state financial policy, along with other causes, began to produce results ominous for the future Greek economic life. In order to cover the extraordinary expenditures incident upon continental wars, the city-states began to alienate their domains and those of the temples and to sink in the wars the surplus in gold and silver objects deposited as offerings in the temples. Working upon the ancient theory of the supremacy of the state, by confiscation of the property of the wealthy and the sale of their lands the states made insecure what had been the safest sphere of investment of capital,

<sup>53</sup> Eduard Meyer, *Kleine Schriften*, pp. 104-116.

<sup>54</sup> Ludwig Mitteis, *Aus den Griechischen Papyrusurkunden* (Leipzig, 1900), p. 26.

<sup>55</sup> Max Weber, *Handwörterbuch der Staatswissenschaften*, I. 112-115.

namely, the soil. The exercise of the sovereign right of the states in establishing bank monopolies hindered the promising development of private banks, such as were springing up in Athens. The difficulty of the food supply for the cities, continually growing in size, in a land which was dependent upon imported food-stuffs, became increasingly apparent. Capitalism had not yet grown to a degree that enabled private enterprise to cope with this problem. Indeed the lack of highly developed transportation facilities and the insufficiency of private capitalistic enterprise backed by a system of state credits, made the question of the city food supply one of the most serious which faced the Graeco-Roman world throughout its ancient history. The governments were forced into the grain business as the greatest entrepreneur. Competition with the state, which could fix prices as the needs of the case might demand, was difficult for the small grain dealer. The growing signs of the inefficiency of the Hellenic city-state financial policy in the fourth century, its inability to establish a sound state credit, its attempts to help itself over hard times by establishing temporary monopolies, and the disastrous results of such a policy upon the security and vitality of private enterprise, are well stated by Riezler in his pamphlet upon Greek finances and monopolies.<sup>56</sup>

Into the civilization of the Persian Empire an entirely new idea was projected when Alexander and his successors founded cities after the Greek model at the junctures of the great highways from the Nile River to India. The heart of each of these city-states was the group of Macedonian and Greek soldiers, officials, and merchants, who formed the citizen body. The native population was herded in from the villages round about. So the cities arose quickly by the Greek process of *synoecism*. Their business ideals and methods must, at first, have been entirely those of Greece. From the outset, therefore, we have two antagonistic political and economic principles pitted against each other—on the one hand the Oriental serf-state working under a system of natural economy, on the other the Greek city-state with its coinage system and its traditions of political and industrial freedom.

The greatest administrative question which confronted the suc-

<sup>56</sup> Kurt Riezler, *Ueber Finanzen und Monopole im alten Griechenland*. Undoubtedly many causes combined to bring about the disorganization in the Greek city-states of the Greek peninsula and Asia Minor in the fourth and third centuries. Riezler has emphasized those causes inherent in the political construction and theory of the city-state, and in its financial policy. The continual wars and the decline of the western trade, due to the growth of manufacturing in the West, must have been powerful elements in producing the economic troubles in Greece itself.

cessors of Alexander in western Asia and Egypt was that of the conduct of their immense royal domains. The inscriptions give us their divergent answers to the problem. The Seleucids sold off large tracts of the royal domain, including the *laoi*, or peasants, and their possessions, to private persons or to cities, granting to the purchaser full title.<sup>57</sup> These alienated estates were then attached to some city-state and enrolled upon its land register. The new land-barons took up their residence in the castles formerly occupied by the Iranian nobles, or dwelt in the cities as absentee landlords. The Persian form of land tenure was not materially changed by this innovation. As to the agricultural laborers it is presumable that, even upon the great estates privately owned, they were still serfs, but now city-state serfs instead of royal serfs,<sup>58</sup> enrolled on the registers of the city-states instead of the registers of the royal domain. They had no legal freedom of changing their domicile, but were definitely attached, for purposes of taxation and administration, to their native villages.<sup>59</sup>

The information upon the agrarian and industrial history of Ptolemaic and Roman Egypt is, thanks to the papyri, much more definite and satisfactory than that for western Asia. Under the Ptolemies all the land of Egypt belonged to the sovereign. It was divided, for purposes of administration, into *Ge Basilike*, or royal domain, and *Ge en Aphesei*, or land under grant. The royal domain was worked directly by the crown by means of royal peasants, *Basilikoi Georgoi*. The land under grant was worked by subjects who had possession, but not absolute ownership.<sup>60</sup> It is necessary to fix clearly the fact that the ownership of all land in Egypt rested with the ruler,<sup>61</sup> and that the mass of the native subject population, both the royal peasants and those who worked the lands under grant for their leaseholders, were increasingly bound to their villages, to their agricultural duties, and certain villein services due to the state.<sup>62</sup>

<sup>57</sup> Rostowzew, *Römischer Kolonat*, pp. 248–251. The chief inscriptions are those published in Dittenberger, *Orientis Graeci Inscriptiones*, nos. 221, 225, 335, 336. To these is to be added the interesting and important inscription from Sardes published by Buckler and Robinson in the *American Journal of Archaeology*, XVI. 11 ff. (1912).

<sup>58</sup> Rostowzew, *Römischer Kolonat*, p. 254.

<sup>59</sup> Max Weber, *Handwörterbuch der Staatswissenschaften*, I. 129. The source of this decision is the Laodice document, Dittenberger, *Orientis Graeci Inscriptiones*, no. 225.

<sup>60</sup> Wilcken, *Papyruskunde, Grundzüge* (Leipzig, 1912), I. 1, p. 271 ff.

<sup>61</sup> *Ibid.*, pp. 270–272; Rostowzew, *Kolonat*, p. 79.

<sup>62</sup> Weber, *Handwörterbuch der Staatswissenschaften*, I. 129.



Highly characteristic of the administrative industrial policy of the Ptolemaic régime is the development of state monopolies. In the Greek city-states of the fourth century these had been temporary expedients, employed in time of need. Under the absolutistic rule of the Ptolemies the monopolies of the state were continuous, carried on in the interest of the fiscus, and covering some of the most important branches of industry.<sup>63</sup> The oil monopoly included a monopoly of production, manufacture, and sale of oil. The banking system, also, was a complete state monopoly. In many other fields the king either had a complete monopoly or appeared as a powerful competitor to private enterprise. So the Ptolemaic king, like the ancient Pharaoh, appears as the greatest manufacturer in Egypt and the greatest merchant.<sup>64</sup>

That part of the population of Egypt which worked upon the royal domains or in the royal manufactories and all those who worked under any form of lease from the state, comprised a distinct class, distinguished in the papyri as "those involved in the royal revenues". The actual laborers in the monopolies were direct serfs of the state and the royal peasants rapidly tended to become serfs. Both alike were bound to the places at which they worked, and were punished if they removed from that place.<sup>65</sup> The royal peasants might at any time be called upon for compulsory labor on canals, in the state mines, or upon the royal transport ships.

Such is the picture of the economic and social situation in western Asia and Egypt when these lands were brought within the Roman Empire. In Asia Minor there were great royal domains, which the Roman state inherited, together with manorial estates and city-state territories. The mass of the agricultural population worked the land in a condition which certainly bordered on serfdom. In Egypt there was the state, the all-powerful Ptolemy at the top, holding an absolute monopoly of the land and of many lines of industry, and appearing as a strong competitor to private enterprise in other lines. Below him stood a middle class, including priests, soldiers, and large leaseholders, who were already growing to be a semi-official body. Below them was the great mass of the Egyptian peasantry and laborers. Imposed upon this social structure in the eastern lands were the Greek city-state foundations, with their free political life, free at least in their local activities, bringing with them the traditions of the old Greek freedom of commerce and

<sup>63</sup> For the most comprehensive statement which we yet have of the number of Ptolemaic monopolies see Wilcken, *Papyruskunde, Grundzüge*, I. 1, p. 239 ff.

<sup>64</sup> *Ibid.*, p. 256.

<sup>65</sup> Rostowzew, *Römischer Kolonat*, p. 66.

industry. The wealthy men of these cities were absentee landlords whose estates lay within the city-state territory. For the taxes from these estates they were responsible. The Hellenistic period is further characterized by a continual increase in the use of commodity money as opposed to exchange in *naturalia*.

The agrarian history of the Roman Republic is too well known to require anything more than a reminding sketch. On the one hand appeared the tendency toward the building of large estates, which was founded in the system of leasing the *ager publicus*. Against this tendency stood the insistent democratic legislation which worked toward the division of the farm lands of Italy among the veteran colonists of the Roman citizen body and the Italian alliance under Rome's hegemony. This struggle to maintain the old freedom of general disposal of the state lands carried with it an attempt to put a limit to the use of slaves on the Italian estates. The story of the failure of the democratic land policy in the second century B.C. need not be repeated. The reasons for the defeat of the citizen peasant and the small farmer are well known.<sup>66</sup> In the first century B.C. the mischief was already done. A few great landowners ruled the state and some part of the old peasantry had become impoverished proletariat. In 104 B.C. a political leader at Rome asserted that there were not 2000 men in the state who had property.<sup>67</sup>

The annexation of Sicily, Sardinia, Corsica, and Spain and the adoption of the principles of the agrarian policies of Sicily and Carthage undoubtedly had a powerful influence upon the development already mentioned in Italy. In Sicily under the Syracusan hegemony a unified and simple system had been adopted in which all the land, whether city-state territory or royal domain, was treated alike. The sovereignty of the state was pre-eminent, all subjects were regarded as *Georgoi*, and all paid the tithe from their lands, just as the royal domains did.<sup>68</sup> In this system the city-states had become administrative units in the process of bringing in the *tributum*. All the landholders of Sicily were regarded by the Romans as "*coloni* and peasants of the Roman people".

Upon the great African and Sicilian estates the laborers were

<sup>66</sup> The correction of the current idea that slave labor entirely drove out free agricultural labor in Italy will be found in the careful and convincing study of Herman Gummerus, "Der Römische Gutsbetrieb als Wirtschaftlicher Organismus", in *Klio: Beiträge zur alten Geschichte*, V. Beiheft (Leipzig, 1906). Poor small farmers continued to maintain themselves throughout the republican period, p. 62.

<sup>67</sup> The capitalistic leader Philippus, in Cicero, *De Officiis*, II. 73.

<sup>68</sup> Rostowzew, *Römischer Kolonat*, p. 234.

largely slaves during the period of the Roman Republic. Free labor was used chiefly at the time of the harvest. In the West, therefore, the small farmer and agricultural laborer was forced into the city, there to seek subsistence in the city's industrial life or to swell the numbers of the poverty-stricken city proletariat. The founding of agricultural colonies as an outlet for this element had practically ceased after the defeat of the Gracchan legislation. The problem of feeding this element of the city population added to the difficulty, always so apparent in antiquity, of the city food supply.

During the first century and a half of the Roman Empire the Greek policy of city foundations spread into the West. With their growth manufactories arose. Their industrial life and financial system were those of the Hellenistic cities. For the taxes and liturgies demanded by the government the well-to-do citizens, chiefly the owners and lessees of agricultural estates, were held responsible.<sup>69</sup> The *pax Romana* of the early imperial period closed the sources of the supply of cheap slaves. The numbers of the slaves decreased in agricultural labor because the prices paid for them rose so high that their use became economically disadvantageous.<sup>70</sup> In the households of the wealthy, slaves still appear, of course; but they are luxuries which could only be afforded for personal service by the rich. In the industries slave artisans were still used side by side with free skilled laborers, as capitalistic investments of their owners to whom the proceeds of their labor went.<sup>71</sup>

Beside the increase in the number of cities and their population, appears an immense increase in the imperial domains in the first century of our era. Those private estates which survived also grew to large proportions. But the smaller estates and leaseholds began to disappear rapidly. The place of slave labor upon these domains and great estates is taken by the *coloni*, who work the soil under a form of sub-lease for private owners or large leaseholders. The pressure upon them is always greater and the application of the doctrine of *origo*, the doctrine that they must remain fixed to the place of their registration upon the state books for the fulfillment of their services, is increasingly more strict.<sup>72</sup> This theory is applied by the

<sup>69</sup> Rostowzew, in his article upon the "Kolonat", in *Handwörterbuch der Staatswissenschaften*, V. 918.

<sup>70</sup> Max Weber in *Handwörterbuch der Staatswissenschaften*, I. 179.

<sup>71</sup> Herman Gummerus in *Klio*, XIV. 317. This article is an extremely careful organization and analysis of the materials extant upon the jewelry and metal trades. The studies promised by Gummerus upon other special lines of trade will be awaited with great interest.

<sup>72</sup> For this development in Egypt see Rostowzew, *Römischer Kolonat*, p. 226; for northern Africa, *ibid.*, p. 227.

state upon the big private *latifundia* as well as upon the imperial domains which the government leased to the *conductores*. These leaseholders, who during the first century were absentee landlords living in the cities, were responsible to the state for the rentals, whether in money or produce, and the government sacrificed to them the *coloni*, or sub-lessees. The results upon the volume of agricultural production could not be otherwise than bad; and this is clearly apparent in the imperial legislation of the end of the first and the course of the second century.

The first of the Roman emperors to legislate against this vicious trend of affairs was, in all probability, Vespasian,<sup>73</sup> who was the grandson of a minor tax official and son of a money lender. From the time of the Flavians to that of Caracalla we have imperial decrees upon the relations of the *coloni*, or small-leaseholders and the actual peasants, to the large-leaseholders (*conductores*) and the great private landlords. This legislation speaks eloquently of the decline in production, the waste lands, and abandoned lands. It attempted to protect the *coloni* from oppression by the big leaseholders and private possessors. It tried to encourage them to bring under cultivation the abandoned fields. But in so doing it drew the bands more tightly about the *coloni*. To meet the oppression of the big landlords the state fixed the amount of produce the *colonus* was to pay to the landlord and the number of days of his obligatory services, on the imperial domains and private domains alike. And that he might be assured the rights which the state guaranteed him he was forced to dwell within the domain.

The system of leasing the public domains spread into Spain, Gaul, and the lands along the Danube. The state mines were also handled in the same way and here, too, by the time of Hadrian the *coloni* had displaced the slave labor formerly employed.<sup>74</sup> In this inability of the imperial administration to re-establish in the East a strong free peasantry, quantitatively and materially strong, and to maintain the old free peasantry in the West, lie the basic causes first of the economic, then of the intellectual decline of the Graeco-Roman civilization. Three results of this inefficiency to meet a great problem are clear and definite.

1. Its great result was the decline in intellectual vigor of the great agrarian population. For the free peasant of Italy and the West in general became a work-tool of the state and the great landowners, a work-tool bound to the place where it was needed. Pri-

<sup>73</sup> *Ibid.*, pp. 325-336.

<sup>74</sup> J. B. Mispoulet, "Le Régime des Mines à l'Époque Romaine et au Moyen Âge", in *Nouvelle Revue Historique de Droit*, pp. 345-391, 491-537 (1907).

vate enterprise and initiative disappeared and the conditions which arose were those already depicted for the end of the Pharaonic régime in Egypt and the Persian Empire in western Asia. In this process the agricultural slavery in the West had undoubtedly played its part.

2. As the Roman Empire passed from its small estates, worked by slave and free labor, to its great imperial and private domains, the number of the free agricultural "production units" declined enormously. Consequent upon the decline in the number of these production units came a great decrease in productivity and the tax-paying power of a given acreage of land. Consequently the state, in order to meet its regular and increasing demands for taxes, was forced to press upon the *decuriones*, who were the great leaseholders or land capitalists resident in the city-states. Under the ancient theory of state liturgies they, too, were bound to their city-state by the doctrine of *origo*. Early in the third century the *decuriones* undoubtedly could be forced by the state to return to the city-state of their *origo* with which their obligations to the state were bound.<sup>75</sup> Thus, in the third century, the middle class, too, was forced to the wall under the weight of its liturgical obligations and the lesser estates fell away more and more and helped to swell the vast domains of single land barons who were strong enough to resist the pressure and force immunities from the government.

3. The establishment of the colonate brought about the economic ruin of the industrial city. It must be remembered that the background of the high civilization of the Greek world was the city-state with its manufactories and its political and economic freedom. This civilization and the industrial city out of which it grew were the heritage of the Roman world. Outside of its Eastern trade and a much smaller volume of trade with the Germans, the empire had no other foreign spheres of consumption. The bulk of the city production must be consumed within the empire. The welfare of that form of economic order, therefore, depended upon the possibility of selling the city production to a wide-spread capacity to buy. And the consumers must necessarily be the country population. The colonate, however, had destroyed the consumption power of the country districts through the vast shrinkage in the free units of production.<sup>76</sup> This eventually led to the abandonment of the cities, which lost in attractiveness as their industrial vigor decayed.<sup>77</sup> The debasement of the imperial coinage in the second and third

<sup>75</sup> Max Weber, *Römische Agrargeschichte*, p. 256.

<sup>76</sup> Ludwig Mitteis, *Aus den Griechischen Papyrusurkunden*, p. 34.

<sup>77</sup> Weber, *Römische Agrargeschichte*, p. 262.

centuries is undoubtedly to be regarded as an administrative effort to meet, by temporary expedients, the conditions arising from the great economic disturbances just depicted.

In the second century the reversion began from an industrial life based on a wide use of coinage to the more primitive conditions of payments in kind and exchange of produce.<sup>78</sup> In the third century the signs of this reversion are much more marked. The big estates again took up the manufacture of the goods which they needed. So the great epoch of the industrial city-state is past and with it "the glory that was Greece and the grandeur that was Rome".

What I have tried to do is to show that it was the loss of economic freedom, even more than the loss of political freedom, which had such disastrous results upon private initiative and finally undermined the ancient Graeco-Roman civilization. I am not unaware that other causes beside those I have enumerated played their rôle in this great historic tragedy. Among those which may be suggested are the spread of city-state and imperial monopolies;<sup>79</sup> the lack of a state system of credits commensurate with and able to support the intricate and relatively highly organized industrial and commercial life of the empire; and the problem of the city food-supply. These questions, like many others in this field of work, are still open to investigation.

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<sup>78</sup> As Rostowzew has pointed out (*Römischer Kolonat*, p. 369), it was quite natural that the *coloni*, who lived in a situation of natural economy and were for the greater part poor, should pay in kind rather than in money.

<sup>79</sup> Under the Roman Empire in Egypt, for example, the state monopolies of the Ptolemies were continued. In my judgment the imperial *cura annonae*, or care of the grain supply, must be handled in connection with private enterprise in the transportation and consumption of grain. A beginning of this form of treatment is to be found in Rostowzew's article upon *frumentum* in the Pauly-Wissowa *Real-Encyklopädie*. The Roman emperors were the great grain-dealers of their world.